

Tracey Dorian

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SUMMARY OF QUALIFICATIONS

Five years of experience as a Support Scientist with IMSG, Inc. in the NOAA's Environmental Modeling Center (EMC) working on forecast verification and global and mesoscale model evaluations. Enthusiastic M.S. graduate with experience in atmospheric science research, data analysis, and team collaboration. Excellent oral and written communication skills. Ability to balance multiple tasks and meet deadlines. Extensive experience with GrADS, HTML, Linux (UNIX), Microsoft PowerPoint. Additional experience with Python, MATLAB, JavaScript, CSS, JQuery, OpenLayers, Leaflet, Microsoft Excel, LaTeX, FORTRAN, NCL, GEMPAK, C++, Perl.

RELEVANT EXPERIENCE

IMSG, Inc. at NOAA/NCEP/EMC (College Park, MD)

October 2014-Present

- ♦ Support scientist with emphasis on global model evaluation and forecast verification
- ♦ Duties include use of verification tools such as the Method for Object-Based Diagnostic Evaluation (MODE), shared findings at weekly EMC Model Evaluation Group (MEG) meetings
- ♦ Presented MODE findings and applications to NCEP/WPC and NCEP/SPC members
- ♦ Evaluated deterministic model and ensemble forecast performance for selected case studies as a member of the MEG, presented meeting summaries at the weekly WPC map discussions
- ♦ From 2015 to 2019, participated in the annual Hazardous Weather Testbed (HWT) Spring Forecasting Experiment (SFE) at NOAA/SPC in Norman, OK, the WPC-HMT Flash Flood and Intense Rainfall (FFaIR) Experiment at NOAA/WPC in College Park, MD, and the WPC-HMT Winter Weather Experiment at NOAA/WPC in College Park, MD
- ♦ Close collaboration with Pacific Region Headquarters and lead author of published article entitled "Tropical Cyclone Amos (2016) Forecasting Challenges: A Model's Perspective" in the *Tropical Cyclone Research and Review* journal

EDUCATION

University of Wisconsin-Madison (Madison, WI)

August 2012-August 2014

M.S. in Atmospheric and Oceanic Sciences, August 2014

Emphasis on dynamics, remote sensing, radiation, radar and satellite, climatology, oceanography

- ♦ GPA: 3.63
- ♦ UW-Madison AOS Graduate Student Association, Secretary (2013-2014), Member (2012-2014)
- ♦ Member of American Geophysical Union (2013-Present)

Research Assistant

- ♦ Analyzed TRMM satellite data to examine the diurnal cycle of latent heating in the tropics, applied Fourier Transform Analysis to fit sine curves to the diurnal cycles of the data
- ♦ Completed thesis entitled "Spatial and Temporal Variability of Latent Heating in the Tropics Using TRMM Observations"

Pennsylvania State University (University Park, PA)

August 2008-May 2012

B.S. in Meteorology, May 2012

Emphasis on synoptic-scale systems, computer forecast models, weather forecasting, dynamics and thermodynamics

- ♦ GPA: 3.70 (major), 3.55 (cumulative)
- ♦ Earth and Mineral Sciences Student Council (2010-2012)
- ♦ Penn State IFC/Panhellenic Dance Marathon, Rules and Regulations Committee (2009-2010), EMS THON (2010-2011)
- ♦ Member of American Meteorological Society (2010-Present)
- ♦ Member of the Campus Weather Service, collaborated with teams of weather forecasters (2009-2012)

Research Experience for Undergraduates (REU) Program

May-July 2011

Research Intern at the National Weather Center (NWC) in Norman, OK

- ♦ Presented findings at conference for NWC REU Program and NOAA Hollings Scholars (July 2011)
- ♦ Presented findings in Student Poster Session at annual AMS conference (January 2012)
- ♦ Evaluate the accuracy of a cloud detection algorithm by comparing output with operational MODIS imagery
- ♦ Lead author of paper with Dr. Michael Douglas (NOAA/NSSL) entitled "Choosing the Most Accurate Thresholds for a Cloud Detection Algorithm Using MODIS Imagery"

HOBBIES/INTERESTS

- ♦ Enjoys traveling to baseball stadiums, cooking Mediterranean dishes, and monitoring space weather